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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,271	02/25/2002	Oleg Vyacheslavovich Gritskovich	34286.002	1703

7590	10/30/2007
Frederick F. Calvetti, Esq. Smith, Gambrell & Russell, LLP Suite 800 1850 M Street, N.W. Washington, DC 20036	

EXAMINER	
WAKS, JOSEPH	

ART UNIT	PAPER NUMBER
2834	

MAIL DATE	DELIVERY MODE
10/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/069,271

Applicant(s)

GRITSKEVICH ET AL.

Examiner

Joseph Waks

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claim 6 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Invention I, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on April 20, 2004.
2. This application contains claim 6 drawn to an invention nonelected with traverse in Paper No. 36. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Information Disclosure Statement

3. The information disclosure statement filed on April 9, 2007 fails to comply with 37 CFR 1.97(c) because it lacks a statement as specified in 37 CFR 1.97(e). It has been placed in the application file, but the information referred to therein has not been considered.

Specification

4. The substitute specification filed on April 9, 2007 has not been entered because it does not conform to 37 CFR 1.125(b) and (c) because: It lacks the statement of no new matter entered.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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6. Claims 7-17 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The specification disclosed water flow motion freeing electrons resulting in additional energy released at the expense of friction between the water and the dielectric layer (or cover?) causing an electrostatic break-down of cavitation-and-vacuum structures and the cold nuclear fusion reaction is critical and essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

The claims recite the components and their particular configuration but fail to disclose the relations between the components in such a manner as to present a complete operative device.

The claims neither address the source of the energy introduced to the system and how the disclosed components interact to convert the input energy to generate useful output energy, nor they disclose the desirable energy output from the system (electric power? pumping? propulsion?).

The claims are moot with respect to the traveling magnetic field creating the water motion and where from comes the energy creating such magnetic fields. Neither the source of energy required for water ionization is disclosed in the specification.

7. Claims 7-17 are rejected under 35 U.S.C. 101 because the claimed invention is not supported by either a specific and substantial asserted utility or a well established utility.

The claims are moot with respect to the function and purpose of the claimed elements. However, the specification clearly describes the combined MHD

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pump/generator system as being used for creating water flow motion to free electrons resulting in additional energy released at the expense of friction between the water and the dielectric layer. Specifically applicants state that the friction will cause an electrostatic break- down of cavitation-and-vacuum structures resulting in a cold nuclear fusion reaction.

The specification is also silent with respect to the mechanism of the break as such (i.e. parameters and conditions when such break down occurs) as well as what applicants define as "free electrons".

Regarding cold fusion reaction, there is no reputable evidence of record to indicate the invention has been reduced to the point of providing in current available form, an operative nuclear system (including one that generates nuclear fusion and reaction products). The invention is not considered as meeting the requirements of 35 U.S.C. 101 as being "useful". Note in this respect Nuclear News, in its September 2002 article, "Chemistry casts doubt on bubble fusion", which indicates that there is no convincing evidence that the phenomena attributed to the break- down of cavitation-and-vacuum structures would produce useful sources of energy.

The article has the following statement'.

- By qualifying for the first time the energy inventory in a single cavitating bubble, scientists at the University of Illinois at Urbana-Champaign (UIUC) have determined that fusion is unlikely to occur in volatile liquids such as water or acetone, which was used in the original bubble experiment.

Applicants did not present a reputable factual evidence to support his assumption that the electrostatic break- down of cavitational-and-vacuum structures will result in a cold nuclear fusion reaction. Without reputable evidence to the contrary, the accepted scientific community theory is presumed correct (i.e., no cold nuclear fusion reactions are taking place).

The U.S. Court of Appeals Federal Circuit in the decision (*In re Swartz*, 232 F.3d 862, 56 USPQ2d 1703, (Fed. Cir. 2000)) affirmed the board of appeals decision that the "cold fusion" process for producing energy lacks of utility and enablement since the invention was not adequately disclosed so as to enable person skilled in the art to practice the invention at time of filing without undue experimentation.

8. Claims 7-17 are also rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a specific and substantial asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

Response to Arguments

9. Applicant's arguments filed September 4, 2007 have been fully considered but they are not persuasive.

Regarding applicant's arguments with respect to claim rejection under 35 U.S.C. 112, first paragraph as being not supported by a either a specific and substantial asserted utility or a well established utility, examiner directs applicants attention that the claimed device is incapable of achieving a useful result.

The useful result of any generator, including the MHD generator, is to convert energy from an available source of energy (chemical, nuclear, renewable etc.) into electrical energy. The applicant's proposed system is vague with respect to the source of energy to be converted and in particular with the initial energy starting the conversion cycle. However, once the disclosed MHD generator is fully operational, applicants disclose that the only source of energy supplied to the system comes from the dielectric coating.

The specification clearly defines that during the operation of the MHD generator: "As a result of water flow motion free electrons appear and additional energy releases at the expense of friction of water 3 on layer 2 and electrostatic break-downs of cavitation-and-vacuum structures and the existing reaction of cold nuclear fusion. At this takes place, quantity of electric energy produced on windings 9 may be greater than energy spent on ionization and acceleration of water by electrodes 4 and windings 5. At that, the proposed device and method do not contradict the energy conservation law because excess energy (in respect to input energy) releases from water 3 and internal layer 2 which should be replaced with time. Stabilization of liquid motion 3 is created at the expense of interaction of (e) discharges in it with discharges in chamber 6. In doing so, electric energy may be also collected from windings 10."

Clearly, applicants anticipate that the energy to maintain the internal needs of the system (ionization and acceleration of water by electrodes 4 and windings 5) and the excess energy available for external use will derive from the friction of water 3 on layer

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2 and electrostatic break- downs of cavitational-and-vacuum structures and the existing reaction of cold nuclear fusion.

Examiner has already indicated in the previous Office action that applicants did not present a reputable factual evidence to support the assumption that the electrostatic break- down of cavitational-and-vacuum structures will result in a cold nuclear fusion reaction. Without reputable evidence to the contrary, the accepted scientific community theory is presumed correct (i.e., no cold nuclear fusion reactions are taking place). Nor did applicants present any evidence that sheer friction between the polar fluid of a low dielectric constant (i.e. high conductivity) will result in releasing of free electrons and an additional energy.

Moreover, if release of such energy (resulting in friction between the polar fluid and the dielectric layer) would be possible, in accordance to First and Second Energy Conservation Laws, the system would need to be supplied from outside with additional energy to compensate for the created friction, and in amount exceeding such extra released energy.

Examiner, in accordance to Patent Office rules and regulations, would not take any position in any scientific matter of an unsettled scientific consensus (including the bubble and cavitation related fusion).

Examiner directs applicant's attention to MPEP § 2107, Part II(3) that states:

If the applicant has not asserted any specific and substantial utility for the claimed invention and it does not have a readily apparent well-established utility, examiner shall impose a rejection under 35 U.S.C. 101, emphasizing that the applicant

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has not disclosed a specific and substantial utility for the invention. The 35 U.S.C. 101 and 112 rejections shift the burden of coming forward with evidence to the applicant to:

- (i) Explicitly identify a specific and substantial utility for the claimed invention; and
- (ii) Provide evidence that one of ordinary skill in the art would have recognized that the identified specific and substantial utility was well-established at the time of filing.

The examiner should review any subsequently submitted evidence of utility using the criteria outlined above. The examiner should also ensure that there is an adequate nexus between the evidence and the properties of the now claimed subject matter as disclosed in the application as filed. That is, the applicant has the burden to establish a probative relation between the submitted evidence and the originally disclosed properties of the claimed invention.

Since applicants did not provide the proper evidence such, that one of ordinary skill in the art would have recognized that the identified specific and substantial utility was well established at the time of filing the rejection, the rejection deems to be proper.

The proper evidence may be a certified, independently carried rigorous scientific test results carried by a recognized establishment like a well recognized University in the United States or National Institutes for Standards and Technology (NIST), for example.

Further, if applicants wish to include an-additional information, like the American Nuclear Society November 2006 publication of bubble fusion, such information should be submitted in form of an Invention Disclosure Statement (IDS) and in accordance with 37 CFR 1.97 requirements.

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Furthermore, applicants argue the cold fusion reactions are not critical to the operation of the MHD device disclosed when the whole disclosure is considered, and that while the amount of energy produced may be greater than that inputted is disclosed, no claims to the ability of the disclosed invention to consistently make electrical power, or to enable cold fusion as a critical to practicing the other aspects of the invention were made.

In response, examiner directs applicants' attention to the 35 U.S.C. 101 paragraph that reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Further, examiner directs applicants' attention to the Technical field of the specification that states: "The invention relates to power engineering, namely, to producing of electric energy by means of MHD generators."

Examiner submits that applicants' argument that "no claims to the ability of the disclosed invention to consistently make electrical power" are made, results in a system that presents no new and useful improvement, and therefor in accordance with 35 U.S.C. 101 paragraph lacks of utility. Further, it contradicts the stated purpose of the invention as defined by applicants in the specification.

Regarding the enabling the cold fusion, examiner directs applicants' attention that while the cold fusion per se is not present in the claims, the claimed dielectric coating is defined in the specification as a source of such energy and the only defined purpose of this layer or coating is to create friction between the water and the dielectric layer resulting in electrostatic break- downs of cavitation-and-vacuum structures and

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the existing reaction of cold nuclear fusion. Since no other definition of the dielectric coating being offered, and since the structure is included in the system for purpose, inherently the claimed dielectric coating is equivalent with the creating an electrostatic break- down of cavitation-and-vacuum structures and existing reaction of cold nuclear fusion.

Regarding restriction requirements, applicant elected without traverse on April 20, 2004 Invention II, claims 7-17. Therefore, claims 1-6 are withdrawn from further consideration. Moreover, claim 6 is indefinite since it depends now on canceled claim 5.

Prior Art

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Waks whose telephone number is (571) 272-2037. The examiner can normally be reached on Monday through Thursday 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren E. Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph Waks
Primary Examiner
Art Unit 2834

10/17/07